Coastal Features

CRMC to adopt Sea **Level Rise regulations**

Landmark regulations would be a first for RI

The Rhode Island Coastal Resources Management Council has developed new regulations to address sea level rise, a side effect of climate change and global

0.9

0.8

0.7 feet

0.6 above NGVD

0.5

0.4

0.3

01

-0.1

-0.2

1930

1940

1950

feet between 1930 and 2006.

1960

1970

Years

This graph shows a historic sea level rise of 0.64

also held an October

workshop on the pro-

John King, Professor

Rhode Island's Gradu-

of Oceanography at

the University of

ate School of

posed regulations.

0

Height 0.2 **NAVD 1988**

MSI 1983-200

warming, which scientists have declared is already becoming a major concern.

The CRMC's Planning and Procedures subcommittee on September 24 au-

thorized Executive Director Grover Fugate to seek public input on the proposed new Red Book Section 145 – Climate Change and Sea Level Rise. After that time, the

proposed section returned to the full Council on November 27 for a recommendation to begin rule-making, which begins a 30-day public notice period. The CRMC

HISTORIC SEA-LEVEL RISE - Newport, RI

HEIGHT NOW

Rate of Rise

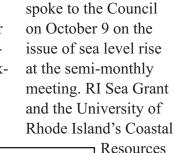
1990

Source: CRMC proposed regulations

2000

25.7 cm +/- 3.1 cm / 100

1980



30 28 26

24 22 20

86420

-2 -4 -6

2010

E

Oceanography, also

Resources Center helped the CRMC to facilitate the synthesis of the science behind the proposed regulations and formulate policy options. "The

CRMC will be in leader in creating the country's first regulations to address sea level rise," said **CRMC** Chairman Michael M. Tikoian. "Sea level rise is quickly becoming a (Continued on next page)

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C R/M

CRMC presents first Clean Marina

The RI Coastal Resources Management Council celebrated Rhode Island's first Clean Marina under its Rhode Island Clean Marina Program on September 11 at Allen Harbor Marina in North Kingstown. The marina is the first to achieve Clean Marina status, and the CRMC awarded the town marina with a special flag and a plaque.

The CRMC adopted the Clean Marina Program in February 2007; the voluntary program is designed to protect the state's coastal waters and benefit the marina industry in Rhode Island. The CRMC developed the program with

(Continued on Page 3)

SLR Regulations, continued from Page 1

real threat, and these regulations, once adopted, will allow the CRMC, as Rhode Island's coastal resources steward, to protect our precious resources and the people who live on the coast."

Climate change refers to fluctuations in the Earth's climate system – a result of natural and manmade causes – and is evidenced largely by rising global temperatures, increasing weather extremes which result in more frequent floods and droughts, and rising sea level. The Intergovernmental Panel on Climate change (IPCC) 2007 report states a potential rise in sea level of 18-59 centimeters by 2100 (depending on the scenario chosen). State experts have agreed that for planning purposes, Rhode Island should expect a minimum rise of 3-5 feet by 2100. The actual sea level rise may be higher than that, however, if greenhouse gases are not reduced far before that time.

The proposed regulations will be a first for the state, and will not only explain scientific findings on sea level rise and provide historic data supporting this idea, but will serve as a tool for the CRMC and others to better manage development and related concerns taking future sea level rise into account. Sea level rise will result in more coastal flooding and erosion, damage to infrastructure and property, drinking water contamination from salt intruding into aquifers and compromised wastewater treatment facilities. A higher sea level will displace coastal populations and ultimately lead to the loss of recreation areas, public space and coastal wetlands. The proposed regulations will authorize the CRMC to develop and adopt policies and regulations needed to manage the state's coastal resources and property and protect life and property from hazards resulting from the projected sea level rise. The Council, under these regulations, would also be authorized to work with the State Building Commissioner and to adopt freeboard calculations to determine new development guidelines.

"Considering sea level rise when assessing appropriately placed development, especially in the areas of upper Narragansett Bay, will be a vital tool for the CRMC as well as municipalities, their planners and developers," said CRMC Executive Director Grover J. Fugate. "Having these regulations in place will allow the Council to determine which areas would be most susceptible to flooding, and to plan accordingly for the future."

For information on the proposed regulations, go to the CRMC web site or http://www.crmc.ri.gov/regulations/proposedregs/2007_nov_notice.pdf.

CRMC, NEANS Panel holds Aquatic Invasive Species forums

The Northeast Aquatic Nuisance Species (NEANS) Panel hosted a series of public forums from October 10-12 to gather comments on the draft Rhode Island Aquatic Invasive Species (RIAIS) Management Plan that was recently completed by the RIAIS Working Group, chaired by the Coastal Resources Management Council.

Aquatic invasive species (AIS) are nonnative animals, plants, or microorganisms that may harm aquatic environments, economic resources, or the public health. The most notorious AIS in the United States is the zebra mussel which has caused billions of dollars in damage while spreading throughout the nation's freshwater systems since its accidental introduction to the Great Lakes in 1988. The RIAIS Plan will become a significant part of the NEANS Panel's efforts to address the threat of AIS in Rhode Island and the northeast once it is approved by the Federal Aquatic Nuisance Species Task Force. The CRMC is a charter member and serves as co-chair of the NEANS Panel, which was established in 2001 under the Federal Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990. This law seeks to prevent the introduction and spread of aquatic invasive species into U.S. waters and to control or eradicate them if necessary.

The NEANS Panel includes the six New England states, the State of New York, and the Canadian Provinces of New Brunswick, Nova Scotia, and Quebec. It represents state, provincial, and federal governments; academia; commercial and recreational fishing interests; recreational boaters; commercial shipping; power and water utilities; environmental organizations; aquaculture; nursery and aquarium trades; tribal concerns; lake associations; and the bait industry. The RIAIS Plan's goals to prevent, control, and abate the impacts of AIS in the state will be implemented on a continual basis.

Please visit the CRMC website, www.crmc.ri.gov for a copy of the RIAIS Plan and information on AIS. Clean Marina, continued from Page 1

the cooperation of the RI Department of Environmental Management, RI Marine Trades Association and Save The Bay.

"The CRMC applauds Allen Harbor Marina as the first Clean Marina in Rhode Island; the efforts of the marina will set an example to others in the state," said CRMC Chairman Michael M. Tikoian. "This program provides an easy to follow process through which Rhode Island marinas can ensure they are environmentally friendly and responsible facilities. We look forward to celebrating other marinas' accomplishments as they are designated Clean Marinas."

The Clean Marina Program is designed to reward marinas that go beyond regulatory requirements by applying innovative pollution prevention best management practices (BMPs) to their day-to-day operations. The program was developed by the CRMC with the cooperation of the DEM, RIMTA, and Save The Bay. The CRMC held a number of workshops last May and Septem-

ber to introduce the marine trades industry to the program.

"The Clean Marina initiative says a lot about Rhode Island's marina trades industry," said Robert Ballou, Assistant to the Director of DEM. "It says that marinas in the Ocean State recognize and are prepared to act upon their roles as stewards of our marine environment."

As part of this program, a Rhode Island Clean Marina Guidebook and self-assessment checklist serve as tools to assist marinas toward becoming RI Clean Marinas, a designation that certifies marinas, boatyards and yacht clubs that have voluntarily exceeded regulatory requirements and have adopted measures to reduce pollution, and recognizes them as environmentally responsible businesses.

Members of the CRMC present Allen Harbor Marina operations manager Bill Slater with the Clean Marina certification plaque. From left are Bob Ballou of DEM, Kevin Cute of CRMC, CRMC Chairman Michael M. Tikoian, CRMC Executive Director Grover Fugate, Jeff Willis of CRMC, and on the right is North Kingstown Town Manager Michael Embury.

"We'd like to thank CRMC for navigating through this program with us," said Chris Ruhling, president of RIMTA. "We look forward to seeing a lot more marinas become part of this Clean Marina Program."

A Clean Marina pledge requires that marinas striving for this designation pledge to do their part to keep the state's waters free of harmful chemicals, excess nutrients and debris. It also states that the marina owners will identify opportunities and implement practices to control pollution associated with vessel maintenance; fueling; sewage handling; storm water management; and facilities management. The marina, once a pledge is signed, must implement the pollution prevention practices within one year and apply to the CRMC for the designation as a Rhode Island Clean Marina.

Marinas that achieve this status will be presented the RI Clean Marina Award and other highly publicized incentives to distinguish them as top tier "green" businesses that offer clean, safe, and environmentally friendly facilities. The designation would also be in lieu of an Operations and Maintenance Plan, now required under the revised Section 300.4 CRMC regulations. Program information is available on the CRMC web site at http://www.crmc.ri.gov/projects/cleanmarinas.html.

CRMC, ACOE to continue Ninigret habitat restoration project

The Rhode Island Coastal Resources Management Council and the US Army Corps of Engineers will begin the second phase of habitat restoration at Ninigret Pond this fall, part of the larger South Coast Habitat Restoration project, which began in 2005.

Eelgrass (Zostera marina) habitat will be restored on the eastern lobe of the flood tidal delta by selectively dredging the sandy bottom to an optimum depth for eelgrass growth. Over the years, the pond has been filled in with sand washing in with the current, choking out the native eelgrass beds that once thrived there. The dredged material will be removed using a hydraulic dredge and pipeline, and the sand will be discharged into an area below high tide in front of the Charlestown Town Beach so that it will naturally wash ashore. This will allow the natural coastal processes to shape the shoreline along the Charlestown and South Kingstown beaches, making them more resilient to the winter storms.

The dredging will be done by Govcon, Inc. of Norman, Oklahoma and Southwind Construction, of Evansville, Indiana. They will begin work in November and complete the project by March 2008. Dredging was completed for the first phase of the Ninigret Pond Habitat Restoration Project in the spring of 2006. The following fall the Army Corps

contracted Steve Granger of North Kingstown to plant a two-acre site with eelgrass seeds. Granger, a Ph.D who was recently associated with URI's Graduate School of Oceanography, is a leading researcher in the field of eelgrass reproduction. A survey conducted by the ACOE in June 2007 showed that the newly seeded eelgrass beds are doing well, with 74 percent of randomly sampled areas having eelgrass shoots. The eelgrass in half of the areas covered 5-100 percent of the pond bottom. Natural re-colonization of eelgrass plants occurred outside of the seeded area within the restored habitat.

In 2005, the Army Corps announced that while they would continue with the dredging of the pond, that



funding would not be available for the eelgrass planting. U.S. Senator Jack Reed (D-RI) aggressively lobbied for the funding to be restored, and was successful.

"I am proud to have secured federal funding over the years for Ninigret Pond and other habitat projects along Rhode Island's south coast," said Reed, who recently helped secure an additional \$650,000 in fiscal year 2007 for the project. "By restoring tidal flows, eelgrass habitat and fish passage to our coastal ponds, these projects not only benefit Rhode Island's coastal environment, they support our state's shellfishing industry and many other commercial fisheries that depend on coastal habitats."

Eelgrass, an important native aquatic plant that grows in shallow sub-tidal areas, functions as a nursery, refuge and feeding ground for many marine species. Eelgrass is a vascular plant that has roots and needs light for photosynthesis just as plants that grow on the land, and reproduces through rhizomes and seeds.

"The CRMC is pleased to announce the start of phase two work on dredging and reseeding Ninigret Pond," said CRMC Chairman Michael M. Tikoian. "We are so thankful that Senator Reed was able to secure federal funding for the continuation of this vital project. The South Coast Habitat Restoration Project as a whole will improve navigation into the ponds and most importantly, improve valuable eelgrass beds in Ninigret Pond, which serve as nurseries to many aquatic species."

CRMC, Save Bristol Harbor celebrate ROWs

Save Bristol Harbor adopts five Bristol ROWs under CRMC Adopt-an-Access Program

Officials from the Town of Bristol, along with the Rhode Island Coastal Resources Management Council and Save Bristol Harbor, gathered at one of the town's CRMC-designated Rightsof-Way on November 19 to cele-

brate the adoption of five local ROWs through the CRMC's Adopt-an-Access Program.

Bristol Town Administrator Diane C. Mederos, members of the town council. CRMC officials and staff and representatives from Save Bristol Harbor visited the Walley Street (S-6) Right-of-Way to celebrate that and four other Bristol ROWs that the group recently adopted by Save Bristol Harbor. The others include Poppasquash Road (S-19), Oliver Street (S-22), Constitution Street (S-4) and Union Street (S-5). "The Walley

Street and other Rightsof-Way are prime public

access points in Bristol, with access to the beach and are great spots for recreational fishing," said CRMC Chairman Michael M. Tikoian. "It's vital that we preserve these designated public access points for all members of the public."

The CRMC Adopt-an-Access program ensures that ROWs are maintained and protected as scenic access points that lead to quality fishing sites, to be utilized and enjoyed by the public. The adopted locations are protected from the rapid development of the coastline, and the lapse of time, which has left many other ROWs overgrown and difficult to access. Under the program, the CRMC, adoptive partner and the town in which the ROW is located enter

into an agreement that permits the partner to install Adopt-an-Access signage with logos of both the CRMC and that group.

"We are proud to showcase these five Rights-of-Way as an example of what the CRMC does

bor has adopted along the Bristol Harbor shoreline. We are very grateful for the support we have received from the Town of Bristol for making this adoption a reality for SBH."

For more information on the CRMC's Adopt-an-

Access Program, please contact Kevin Cute at 783-3370.

"Bristol being a peninsula. we value our access to the water – it is what makes Bristol so unique and special," said Bristol Town Administrator Diane C. Mederos. "Volunteers are the lifeblood of our community, and when you put those two important elements together you have the very essence of Bristol. I thank especially Save Bristol Harbor, and individuals such as Stan Dimock and Steve Brigidi, for leading the way.

"To those who continue to volunteer to make Bristol the extraordinary place it is – I applaud them for their public spiritedness and I am in awe of the commitment to community they exhibit here not only today but tomorrow as well."

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celebrate the ROW adoptions. From left to right are Stephan Brigidi and Stan Dimock of Save Bristol Harbor, CRMC Chairman Michael M. Tikoian, Bristol Town Administrator Diane

to protect the public's right to access, and the success of the Adopt-an-Access Program," Tikoian said. "Hopefully others throughout the state will be adopted by organizations and concerned citizens through our program, to provide them regular maintenance and additional protection from development. We applaud Save Bristol Harbor in their efforts and their commitment to public access in Bristol."

Stan Dimock of Save Bristol Harbor commented, "Save Bristol Harbor is delighted to be a participant in CRMC's ROW Adopt-an-Access program. We have already recruited 10 volunteers from our membership who are interested in maintaining the five ROWs that Save Bristol Har-

Members of Save Bristol Harbor, the CRMC and town of Bristol Mederos and CRMC Vice Chair Paul Lemont.



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Restore America's Estuaries seeks proposals for national conference

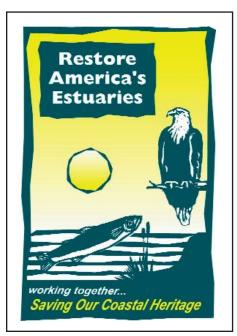
Restore America's Estuaries has released a Call for Dedicated Sessions, Presentations and Posters for the 4th National Conference on Coastal and Estuarine Habitat Restoration – Creating Solutions through Collaborative Partnerships.

Proposals for the conference are due January 31, 2008. The 4th National Conference will be held in Rhode Island, from October 11-15, 2008 at the Rhode Island Convention Center in Providence.

The 4th National Conference on Coastal and Estuarine Habitat Restoration will advance the science, pace, practice, and success of habitat restoration at all scales. Past conference locations include Baltimore in April 2003 (800 attendees), Seattle in September 2004 (1,000 attendees), and New Orleans in December 2006 (1,400 attendees). The conference brings together the entire coastal and estuarine habitat restoration community and provides a unique blend of people and policy, science and strategy, business and best practices.

The conference program will address all aspects of coastal and estuarine habitat restoration. Habitat restoration – manipulation of the physical, chemical or biological characteristics of a site with the goal of returning self-sustaining natural or historic structure and functions to former or degraded habitat – offers great promise for reversing trends of habitat loss and degradation and is a crucial component of comprehensive ecosystem restoration, protection and management.

This is the only national conference that focuses solely on coastal habitat restoration. It will bring timely national attention to the challenges to and opportunities



for comprehensive coastal ecosystem restoration. Healthy coasts and estuaries are essential to the social, economic and ecological wellbeing of humans in the coastal landscape, according to Restore America's Estuaries. Successful habitat restoration at all scales is critical to achieving this. The fiveday Conference will explore the state-of-the-art in all aspects and scales of restoration, and will be comprised of field sessions, plenary sessions, expert presentations, special evening events, workshops, a poster hall, and a Restoration Exposition.

The conference is a na-

tional and international gathering of the coastal and estuarine habitat restoration community, including the public and private sector. Restore America's Estuaries will work with 200 partnering and supporting organizations to develop and host the conference, including the CRMC.

Restore America's Estuaries, established in 1995, is a nonprofit organization working to preserve the nation's coasts and estuaries by protecting and restoring the lands and waters essential to the richness and diversity of coastal life. Restore America's Estuaries and its affiliate members collectively represent millions of citizens in all coastal regions of the United States. Restore America's Estuaries authored and championed passage of the Estuary Restoration Act of 2000 - groundbreaking legislation providing strong federal commitment and resources toward a goal of restoring function to one million acres of estuarine habitat by 2010. Restore America's Estuaries led the design of A National Strategy to Restore Coastal and Estuarine Habitat, and defined and published the Principles of Estuarine Habitat Restoration in partnership with the Estuarine Research Federation.

For more information, contact Steve Emmett-Mattox at 303-652-0392 or

program@estuaries.org. To download the Call for Dedicated Sessions, Presentations and Posters, go to www.estuaries.org/conference.

Council Profile: Bruce Dawson

CRMC Council member Bruce Dawson has always been active – whether it's on the golf course, on the slopes or on the water – and he continues that trend as one of the newer members of the Council.

Dawson, 65 and a North Kingstown resident, was chosen in spring of 2006 to fill the vacancy left by Laurence Ehrhardt, who gave up his seat on the CRMC Council when he was elected as a state representative. Dawson had experience with his local government, and also had experience with the CRMC.



CRMC Council Member Bruce Dawson

"We were both from North Kingstown and I was an alternate 10 years ago and I sat on CRMC subcommittees when there was no North Kingstown representative on the Council," he said. Dawson served as a member of the town's Harbor Management Commission for more than a decade, and so he often saw local issues that would eventually make their way to the CRMC.

A recent retiree, Dawson previously spent 43 years as a printing salesman, wrapping up his career working for R.R. Donnelley. Originally from Pawtucket, he attended Tolman High School and graduated from the University of Rhode Island in 1964 with a degree in Business Administration. His real love, however, was baseball.

"I wanted to be a professional baseball player," Dawson said, adding that he played in college, until an injury sidelined him. "I slid into third base, (result-

ing in a) fracture and dislocation, and bye-bye baseball." He said he probably would have signed with someone, but it wasn't ever going to realistically be a career. "I did a lot of coaching," he said, throughout his son's youth.

Married for 42 years to his wife Barbara, Dawson said he was "very interested in the water. Growing up in Pawtucket I never had those experiences" of going to be beach. "After we got married we moved to North Kingstown and I got involved with the water and environmental things." The couple started sailing with friends and then purchased their own boat; Dawson now owns a 36-foot sailboat that the couple races on Wednesday nights and cruises on during weekends.

The transition from being involved in the town to being on the Council was natural, Dawson said.

"From being involved with the harbor management commission and after two years of being on its steering committee, I applied for the position and was appointed by the town council and I stayed on it until the position at the CRMC opened up," he said. "I often looked at any local applications that would go to the CRMC. I like to think that because of the experience that I had at that level someone recommended me" when the Council member slot opened at CRMC.

As for his experience on the CRMC, Dawson said he's still learning and is constantly absorbing all that goes into the CRMC's regulatory program.

"Everyone on the Council seems to have an area that they're very interested in and knowledgeable in," he said. "Everybody adds a little bit to it. You look at the expertise you have in an area and hope you can apply it.

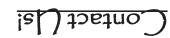
"I had a feeling early on that I was playing catch-up," he admitted. "I'm getting it (the regulations) more now, but it's not something you can sit down and go through. You keep a little something with you with each application."

And in his short tenure on the Council, Dawson said he's already witnessing big changes.

"With all of the SAMPs, the CRMC has come to realize that there's no rubber stamp for the Bay; each area has its own issues," he said.

And some things remain the same.

"We have to watch out for conflicts, like aquaculture," Dawson said. "It's a balance. Everything that comes [before the Council] can lead to conflict of one sort or another. We need to make sure we don't shut out one group for the benefit of another."



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COASTAL RESOURCES MANAGEMENT COUNCIL



The Walley Street ROW in Bristol

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